ZEV Program Credit Glut Situation and Solutions

Cal ETC Analysis and Presentation

Dean Taylor

December 5, 2006

Overview of Presentation

- Comparison of CalETC and staff analysis of the credit glut
- Implications of the credit glut based on the 2001 ZEV Program
- Implications of the credit glut based on the Nov 21 staff strawman proposal

Comparison of CalETC and staff analysis of the credit glut

- CalETC has been investigating the credit glut for the last two months
 - Based on published information, newspaper quotes, etc
- CARB low and high estimates are too low.
- The CalETC low estimate could be too low, as several factors could make it much worse.

Staff Estimate of Credits is too low

| Grand Total CalETC low case credits in early years | Vehicles made in | 2001* | | | | | | 2007 | | Total vehicles |
|--|---------------------|-------|-------|-------|------|------|------|------|--------|-------------------|
| CalETC low case NEV | | | | | | | | | | |
| total credits 1999-2005 | 29,200 | 800 | 62800 | 15250 | 3375 | 441 | NA | NA | 82666 | 31500 |
| CalETC low case BEV | | | | | | | | | | |
| total credits 1999-2005 | 675 | 13800 | 9291 | 553 | 0 | 0 | NA | NA | 23644 | 1789 |
| CalETC low case FCV | | | | | | | | | | |
| total credits 1999-2004 | 25 | 0 | 1040 | 500 | 700 | NA | NA | NA | 2240 | 122 |
| CalETC low case station | | | | | | | | | | |
| car total credits '03 - '07 | 0 | 0 | 360 | 180 | 3225 | 5447 | 5423 | 7760 | 22396 | 2060 |
| Grand Total CalETC low | | | | | | | | | | |
| case credits | | 14600 | 73491 | 16483 | 7300 | 5888 | 5423 | 7760 | 116345 | 35471 |
| Grand Total staff low | | | | | | | | | | |
| case credits | | 14000 | 38030 | 1170 | 0 | 0 | 0 | 0 | 53200 | 9164 |

Because of the expected program delay in 2003 and 2004, credits are accumulating and not being used. Using credits is the Solution. As much as 37,000 credit would have been used in 03 & 04



OEMs Don't Have to Do Anything For A Long Time Under 2001 Program Rules

- The CalETC low case is 94,000 credits (BEV, NEV, FCV)
 - 116,000 if E-motion can do 2000 vehicles in four years
- The CalETC high case is about 160,000 credits, mainly due to full placement of NEVs by March 31, 2003
- Increased numbers of BEVs or station cars can also make the CalETC low case estimate much larger
- Worst case, if you believe all of the press releases and other public data and if E-motion does what they say, it could be 250,000 to 300,000 credits.

Staff Proposal Makes Credit Glut Much Worse

- It pushes out the start of ZEV production by about 2 years.
- It reduces the number of ZEV produced in MY 2005 to MY 2010 by about 66%
- CalETC has a three part strawman solution to solve the credit glut